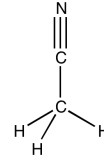


Identification

CH₃CN
 M = 41,05 g/mol
 CAS [75-05-8]
 EC number: 200-835-2
 Taric code: 2926 90 95


Synonyms

Methyl cyanide, Cyanomethane

Applications

chromatography, for spectroscopy, synthesis of organic products, solvents.

Specifications

| | | | |
|-----------------------------------|-------------------|---|-----------|
| assay (G.C.)..... | min. 99,9 % | gradient grade (210 nm) | |
| identity (IR-spectrum)..... | passes test | maximum peak absorbance: | 0,0015 AU |
| density (20°/4°)..... | 0,779 - 0,783 | maximum background absorbance: | 0,01 AU |
| acidity..... | max. 0,0002 meq/g | | |
| alkalinity..... | max. 0,0001 meq/g | Suitable for liquid chromatography | |
| residue on evaporation..... | max. 0,0001 % | at 254 nm | |
| water (K.F.)..... | max. 0,01 % | | |
| | | fluorescence analysis: | |
| min. transmission/max. absorbance | | maximum absorbance: 1 ppb as quinine | |
| in a 1,0 cm cell at | | (in 0,1 N sulfuric acid), for the spectra | |
| wavelength: | T(%) A (AU) | recorded at the following conditions: | |
| 195 nm..... | 80 % 0,097 AU | EX wavelength between 220 and 450 | |
| 200 nm..... | 95 % 0,022 AU | EM wavelength between 250 and 550 | |
| 210 nm..... | 97 % 0,013 AU | | |
| 220 nm..... | 98 % 0,009 AU | Microfiltered through membranes | |
| | | of pore diameter 0,22 µm | |
| | | suitable for UPLC | |

Physical data

- Density: 0,786 g/cm³
- Solub. in water: (20 °C): miscible
- Melting point: -45,7 °C
- Boiling point: 81,6 °C
- Flash point: 2 °C
- Ignition temperature: 524 °C
- Vapour pressure: (20 °C) 97 hPa
- Refraction index: (n 20 °C) 1,3442
- Viscosity: (20 °C) 0,39 mPas
- Dipolar moment: (20 °C) 3,44 Debye
- Dielectric const.: (20 °C) 37,5
- Evap. heat: (81 °C) 833 KJ/kg
- Saturation conc.: (20 °C) 163 g/m³
- Expl. limit (upper): 17 Vol%
- Expl. limit (lower): 3,0 Vol%

Safety - GHS**Signal Word:** Danger**Hazard Statements:**

H225: Highly flammable liquid and vapour.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H332: Harmful if inhaled.

H319: Causes serious eye irritation.

Precautionary Statements:

P210: Keep away from heat / sparks / open flames / hot surfaces. - No smoking.

P241: Use explosion-proof electrical / ventilating / lighting / equipment.

P261: Avoid breathing dust / fume / gas / mist / vapours / spray.

P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Toxicological data

• LD 50 (oral, rat): 2730 - 3800 mg/kg

• MAK: 20 ml/m³, 34 mg/m³

• WGK: 2

• Poison class CH (Swiss): 2

Transport/storage

• ADR: 3 F1 II • UN 1648 • ACETONITRILE

• IMDG: 3 II • UN 1648 • ACETONITRILE

• IATA/ICAO: 3 II • UN 1648 • ACETONITRILE

• PAX: 305

• CAO: 307

• Store between 15°C and 25°C